

(FILE 'HOME' ENTERED AT 17:58:59 ON 22 AUG 2002)

FILE 'USPATFULL' ENTERED AT 17:59:06 ON 22 AUG 2002

L1 9048 S NODE# (P) PROTOCOL#  
L2 10524 S ACTIVE AND STANDBY  
L3 70867 S DATABASE OR DATA BASE  
L4 603 S GATEWAY (P) L1  
L5 86 S L4 (P) MODE#  
L6 4 S L5 (P) L3  
L7 0 S MIRROR AND L5  
L8 2 S MIRROR? AND L5  
L9 21236 S SERVER AND CLIENT  
L10 257638 S NETWORK OR INTERNET  
L11 20294 S L9 AND L10  
L12 38 S L11 AND L5

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=> d l12 1- ti,pn,ab

YOU HAVE REQUESTED DATA FROM 38 ANSWERS - CONTINUE? Y/(N):y

L12 ANSWER 1 OF 38 USPATFULL

TI System and method for remote monitoring and maintenance management of vertical transportation equipment  
PI US 2002113877 A1 20020822  
AB The Vertical Transportation-Maintenance Management System (VTMMS) invention described herein is directed towards an automated system and method for monitoring, management, and maintenance of transportation equipment, including but not limited to escalators, elevators, moving walkways, baggage carousels, revolving doors, and automated doors. The system and method is also adaptable to heating, ventilation, and air conditioning units and other building equipment. The system and method collects data from the monitored equipment and preserves data that is related to equipment alarms, faults, failures, and maintenance requirements and activities as determined by monitoring software.

L12 ANSWER 2 OF 38 USPATFULL

TI **Internet** protocol-based computer **network** service  
PI US 2002112076 A1 20020815  
AB The system is an **Internet** Protocol-based computer **network** service that when installed, allows connected computers access **Internet** Protocol-based services if they are configured for any **Internet** Protocol-based **network**. This is different from a conventional **Internet** Protocol-based **network** in which connected computers must be configured specifically for that **network** to access **Internet** Protocol-based services or to have custom applications running on them to allow this access. These services include, but are not limited to, World-Wide-Web browsing, sending and/or receiving electronic mail, file transfer, and multimedia conferencing. The system supports any service that is **Internet** Protocol-based. The system is completely software-based. That is, it is a set of algorithms that are run on a computing platform. The platform that is executing the algorithms (the **server**) is a stand-alone system. No proprietary software is installed on the **client**.

L12 ANSWER 3 OF 38 USPATFULL

TI TRANSMISSION CONTROL PROTOCOL/**INTERNET** PROTOCOL (TCP/IP) PACKET-CENTRIC WIRELESS POINT TO MULTI-POINT (PTMP) TRANSMISSION SYSTEM ARCHITECTURE  
PI US 2002099854 A1 20020725  
AB A packet-centric wireless point to multi-point telecommunications system includes: a wireless base station communicating via a packet-centric

protocol to a first data **network**; one or more host workstations communicating via the packet-centric protocol to the first data **network**; one or more subscriber customer premise equipment (CPE) stations coupled with the wireless base station over a shared bandwidth via the packet-centric protocol over a wireless medium; and one or more subscriber workstations coupled via the packet-centric protocol to each of the subscriber CPE stations over a second **network**. The packet-centric protocol can be transmission control protocol/**internet** protocol (TCP/IP). The packet-centric protocol can be a user datagram protocol/**internet** protocol (UDP/IP). The system can include a resource allocation means for allocating shared bandwidth among the subscriber CPE stations. The resource allocation is performed to optimize end-user quality of service (QoS). The wireless communication medium can include at least one of: a radio frequency (RF) communications medium; a cable communications medium; and a satellite communications medium. The wireless communication medium can further include a telecommunications access method including at least one of: a time division multiple access (TDMA) access method; a time division multiple access/time division duplex (TDMA/TDD) access method; a code division multiple access (CDMA) access method; and a frequency division multiple access (FDMA) access method.

The first data **network** includes at least one of: a wireline **network**; a wireless **network**; a local area **network** (LAN); and a wide area **network** (WAN). The second **network** includes at least one of: a wireline **network**; a wireless **network**; a local area **network** (LAN); and a wide area **network** (WAN).

L12 ANSWER 4 OF 38 USPATFULL

TI Data compression through adaptive data size reduction

PI US 2002090141 A1 20020711

AB A computing-device implemented method for compressing data, where such devices include a computer, personal digital assistant (PDA), home appliance, and the like. The data includes bandwidth intensive information such as that used in video conferencing, MPEG and equivalent types of digital video encoding, multi-media data transfers, and interactive gaming. In one implementation, a 3D model has objects defined therein. Each object is defined according to a data collection, each element within the collection having a first data size. A distance is determined between a reference point in the model, and a bounding box for an object. A data reduction factor is selected based, at least in part, on the distance. The data collection is compressed according to the distance by mapping each data of the first data size to data having a second data size smaller than the first data size. Other compression methods and apparatus are disclosed.

L12 ANSWER 5 OF 38 USPATFULL

TI Method and apparatus for mobile wireless communication

PI US 2002073170 A1 20020613

AB An apparatus and method have a hub **server** for storing a relational database of information relating to trucking operations. The hub **server** is connected via a satellite link to an earth satellite which is connected through downlinks and uplinks to localize truck stop servers (TSS). The TSS in turn communicate via spread spectrum radio frequency signals with hand-held computers, such as personal digital assistants. The PDAs are used by truck drivers to send and receive e-mails and other information such as electronic freight bills, fuel information, route information and the like from the trucking company and to transmit information to the trucking company. In addition, a trucking company **server** may be accessed through the **Internet** by customer servers or third party servers to identify aspects of the trucking shipment.

L12 ANSWER 6 OF 38 USPATFULL

TI **Network**-based mobile workgroup system

PI US 2002069278 A1 20020606

AB A **network**-based mobile workgroup system has considerably wider appeal and application than normal virtual private networks in that it provides seamless mobility across a number of access technologies at the same time as it offers a granular security separation down to workgroup level. The mobile workgroup system is an access management system for mobile users with VPN and firewall functionality inbuilt. The mobile user can access the mobile workgroup system over a set of access technologies and select **server** resources and correspondent nodes to access pending their workgroup membership approvals. All workgroup policy rules are defined in a mobile service manager and pushed down to one or more mobile service routers for policy enforcement. The mobile service router closest to the mobile **client**, and being part of the mobile virtual private **network**, performs regular authentication checks of the mobile **client** during service execution. At the same time it performs traffic filtering based on the mobile user's workgroup memberships. Together, these two components constitute an unprecedented security lock, effectively isolating a distributed workgroup into a mobile virtual private **network**.

L12 ANSWER 7 OF 38 USPATFULL

TI Autonomous local area distributed **network**

PI US 2002067717 A1 20020606

AB An autonomous local area distributed **network** provides a peer-to-peer **network** to connect nodes and devices using low cost and low bandwidth communication techniques, thus allowing the **network** to share node resources and distribute programming tasks across the different nodes. Home appliances and devices such as refrigerators, televisions, light switches, light fixtures, garage door openers, stereos, and the like may be configured as nodes on the peer-to-peer **network**. Operational programs, referred to as "sequences," may be distributed across nodes in a **network** to enable the maximum utilization of available node resources.

L12 ANSWER 8 OF 38 USPATFULL

TI Webpad and method for using the same

PI US 2002065927 A1 20020530

AB A webpad and method for using the same are provided. In one embodiment, information is determined about primary content being played on an audiovisual device using a computer system. Ancillary data is obtained relating to the primary content based on the information about the primary content. The ancillary data is automatically sent to the webpad for access therefrom as the primary content is being played on the audiovisual device.

L12 ANSWER 9 OF 38 USPATFULL

TI Webpad and method for using the same

PI US 2002065902 A1 20020530

AB A webpad and method for using the same are provided. The webpad includes an adapter module attached to a personal digital assistant. The adapter module includes a wireless transceiver for sending and receiving data via a wireless communication protocol.

L12 ANSWER 10 OF 38 USPATFULL

TI System and method for providing requested quality of service in a hybrid **network**

PI US 2002064149 A1 20020530

AB Telephone calls, data and other multimedia information is routed through a hybrid **network** which includes transfer of information across the **internet**. A media order entry captures complete user profile information for a user. This profile information is utilized by

the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a **network** than previously possible, and control **network** activities from a central site. The hybrid **network** also contains logic for responding to requests for quality of service and reserving the resources to provide the requested services.

L12 ANSWER 11 OF 38 USPATFULL

TI Method and apparatus for providing optical internetworking to wide area networks, metropolitan area networks, and local area networks using modular components

PI US 2002049862 A1 20020425

AB An arrangement providing optical internetwork to Wide Area Networks (WAN), Metropolitan Area Networks (MAN), and/or Local Area Networks (LAN) as a peripheral device using modular components. WANs can be defined to include wireless, SONET/SDH, or DWDM networks for long haul applications. MANs can be defined to include wireless, Synchronous Optical **Network** (SONET)/Synchronous Digital Hierarchy (SDH), or Wavelength Division Multiplexing (WDM) networks for Metro applications. The exemplary apparatus comprises of a printed circuit board (PCB) with a Small Computer System Interface (SCSI) connector, which provides the interface to a WEB, DataBase (DB), General-Purpose (GP) **server**, workstation, or PC. The SCSI Optical Device (SOD) provides gateway functionality to WAN, MAN, or LAN. SOD's processing is accomplished by one, two, or four processors depending on the OC rate of the optical (fiber) connection. Buffering of data is done by RAM memory located on the circuit board. The data is transmitted on the fiber using standard WAN or MAN protocols. The fiber connection is accomplished through a **Network** Interface Component (NIC) that consist of an eight way multiplex optical connector to the fiber and a standard Bus connector that interfaces to the circuit board. The NIC is removable and has eight optical frequencies. The SOD also has two slots for Personal Computer Memory Card International Association (PCMCIA) cards. The first PCMCIA card is required and provides software/firmware instructions for execution by the gateway processor(s). Without the first PCMCIA card, the SOD will not function. The second PCMCIA card is optional and provides an interface to perform field diagnostics and/or **network** management for trouble analysis via a LAN or TTY port.

L12 ANSWER 12 OF 38 USPATFULL

TI Method and apparatus for robust NAT interoperation with IPSEC'S IKE and ESP tunnel mode

PI US 2002046348 A1 20020418

AB Linux's NAT (**Network** Address Translator) implementation, IP Masquerade, includes a VPN Masquerade feature that provides interoperation of NAT with IKE and ESP tunnel mode within the IPsec security protocol suite. VPN Masquerade uses heuristics to route packets from a **server** on the **Internet** to a **client** on a local **network** that shares access to the **Internet** with other clients over a common access link through a router running NAT. VPN Masquerade, however, is susceptible to crashes, collisions and race conditions that can disable IPsec communication. These are prevented, or recovery from such is automatically effected, by sending over a tunnel a control packet, a "ping", from the **client** at one end of the tunnel to the **server** at the other end of the tunnel, and then waiting to send any packets other than a control packet over the tunnel until a responsive control packet is received from the **server**. The tunnel is defined by an epoch that comprises one security association (SA) in each direction that has a negotiated limited lifetime and defines the use of the ESP protocol in tunnel mode with negotiated authentication and/or encryption keys and a security parameters index (SPI) chosen by the SA's destination. If the **client** does not receive a response to the "ping" within a

predetermined time, then it re-"pings" the **server** up to a predetermined number of times and, if no response is received, rekeys the tunnel. Further, the **client** "pings" the **server** if no packet is received on a tunnel for a predetermined period of time. By also configuring the **server** to wait to switch to a new epoch until it receives a "ping" from a **client**, certain race conditions can be eliminated. Alternatively, the **client** can be configured to ignore an attempt by the **server** to start a negotiation for rekeying the tunnel. Automatic recovery from a crash of the NAT is also provided by automatically starting a new IKE session if attempts to rekey a tunnel are not successful.

L12 ANSWER 13 OF 38 USPATFULL

TI Intelligent **network**

PI US 6363411 B1 20020326

AB In a telecommunications switching **network** having a resource complex including **network** switches, an intelligent service platform for providing intelligent call processing and service execution for call events received at the switches and requiring call processing services. A centralized administration system is provided that comprises a system for storing one or more reusable business objects that each encapsulate a distinct call-processing function, and any associated data required by the business object; a system for distributing selected business objects and associated data to selected nodes in the switching **network** based on pre-determined node configuration criteria; and, a system for activating the business objects in preparation for real-time use. A computing platform is provided within each node for executing those business objects required to perform a service in accordance with an event received at the **network** switch. Also within a node is a storage and retrieval system for sorting and retrieving selected objects and any associated data distributed by the administration system, and making them locally available to the computing platform when required to perform a service. An underlying location-independent communication system is provided to coordinate interaction of one or more business objects to perform the service in response to needs of the received event.

L12 ANSWER 14 OF 38 USPATFULL

TI Method and apparatus for exchange of information in a communication **network**

PI US 2002021696 A1 20020221

AB A technique for connecting a dialed B-party number to a data object is described. The connecting of a B-party number to a specific data object, hereafter referred to as phonepage, will allow an A-party direct access to information that a B-party wishes to display to a calling party. The phonepage resides in a memory in a telecommunications **network**, or in a memory in a data-communications **network** connected thereto. The phonepage may have a similar appearance to an **Internet** web page, but may also take other appearances. The displaying of the phonepage may be made dependent upon the capabilities of the A-party user equipment.

L12 ANSWER 15 OF 38 USPATFULL

TI Method for web based storage and retrieval of documents

PI US 631777 B1 20011113

AB A document-collaboration videoconferencing system between a first and a second conference attendee. In one embodiment, the system comprises a document **server**, a local presenter computing system, and a conferencing computing system. In this embodiment, the local presenter computing system transfers a document to the document **server** over a **network**, and the first conferencing system copies such document over the **network** from the document **server**.

L12 ANSWER 16 OF 38 USPATFULL

TI Location of subscriber terminal in packet-switched radio system  
PI US 2001009857 A1 20010726  
AB The invention relates to a packet-switched radio system and to a method of performing a function of the subscriber terminal location service in a packet-switched radio system. The method comprises the (302) subscriber terminal transmitting a request message for location service to the core **network** of the radio system via the radio system; (304) performing at least one function of the location service required in the request message; (306) the core **network** transmitting a response message to the subscriber terminal via the radio **network**.

L12 ANSWER 17 OF 38 USPATFULL

TI Location of subscriber terminal in packet-switched radio system  
PI US 2001009544 A1 20010726  
AB The invention relates to a packet-switched radio system and to a method of locating a subscriber terminal in a packet-switched radio system. In the method (302) the core **network** of the radio system transmits a location service request message to the radio **network** of the radio system; (304) the radio **network** transmits information to a subscriber terminal in a paging message that the subscriber terminal is requested to initiate the location service; (306) the subscriber terminal that received the paging message transmits a paging response message to the radio **network**; (308) the radio **network** transmits the paging response message to the core **network**; (310) the **network** part locates the subscriber terminal on the basis of the information included in the paging response message.

L12 ANSWER 18 OF 38 USPATFULL

TI Home office communication system and method  
PI US 6230133 B1 20010508  
AB A system for utilizing multiple simultaneous communication channels has a control and display system (16). A modem (12) is controlled by the control and display system (16) and connected to a telephone line (14). A multiplexer (18) is connected to the modem (12) and multiplexes a plurality of outgoing data streams in a predefined format and demultiplexes an incoming data stream from the modem (12). A speech encoding system (20) generates a plurality of speech packets to form one of the plurality of outgoing data streams. A telephone line control system (22) generates a plurality of control packets forming one of the plurality of outgoing data streams and an information channel (24) forms one of the plurality of outgoing data streams.

L12 ANSWER 19 OF 38 USPATFULL

TI **Client**-based dynamic switching of streaming servers for fault-tolerance and load balancing  
PI US 6195680 B1 20010227  
AB A **client**-based system for the fault tolerant delivery of real-time or continuous data streams, such as real-time multimedia streams, e.g., live audio and video clips. Multimedia servers are grouped into two or more sets, for example wherein a first set includes one or more primary servers using odd-numbered ports and a second set includes one or more secondary servers using even-numbered ports. The **client** requests a multimedia stream through a control **server** or gateway which routes requests to the multimedia servers; and the **client** receives the stream directly from a selected (primary) **server**. The **client** automatically detects load imbalances and/or failures (complete or partial) and dynamically switches to a secondary **server** in order to continue receiving the real-time multimedia stream with minimal disruption and while maintaining a balanced load across multiple servers in a distributed **network** environment. The determination can be made based on: the received bit or frame rate (for video); a bit rate or

sample rate (for audio); monitoring a delivery rate or for packets arriving out of order: for example using packet numbering mechanisms available in TCP; sequence numbering or time stamp capabilities of RTP (in combination with the User Datagram Protocol (UDP)). In any case, the determination could be based on the rate measurement or monitoring mechanism falling below (or exceeding) some threshold. Alternately, the primary **server** or the control **server** could send an explicit distress or switch signal to the **client**. An explicit signal can be used for example to switch clients in phases with minimal disruption.

L12 ANSWER 20 OF 38 USPATFULL

TI On-the-fly trivial file transfer protocol

PI US 6170008 B1 20010102

AB A **network server**, and a method for building a boot file in response to a standard protocol request. **Network** specific and **client** specific parameters necessary to build the boot file are encoded into the path name and file name of the standard protocol request respectively. A special character in the standard protocol request triggers the **network server** to decode the parameters from the standard protocol request and then use the decoded parameters to build the boot file on-the-fly.

L12 ANSWER 21 OF 38 USPATFULL

TI Method and apparatus for selective call forwarding

PI US 6125126 20000926

AB The present invention provides a selective automatic call forwarding method and system. In response to a request from a subscriber for the selective call forwarding service, a selective call forwarding service record is created for the subscriber which includes the subscriber's telephone number, a "trigger" telephone number, and a call forwarding number associated with the trigger number. An example of the trigger number might be the subscriber's **Internet** access telephone number. An example of the call forwarding number might be the subscriber's mobile telephone number. A determination is made, e.g., a flag is set in the subscriber record, whenever the subscriber is engaged in a communication initiated to the trigger number. Thereafter, incoming calls directed to the subscriber are automatically forwarded to the call forwarding number. However, if the subscriber is currently engaged in a communication with a telephone number other than the trigger number registered in the subscriber's call forwarding service record, incoming calls are handled in a manner other than forwarding the incoming call to the call forwarding number. Such other procedures might include, for example, generation of a busy signal, execution of a call waiting service, or execution of a call completion service.

L12 ANSWER 22 OF 38 USPATFULL

TI Home interface controller for providing interactive cable television

PI US 6100883 20000808

AB An interactive television information system coupled to a cable television system having a headend for supplying information services and an information service distribution **network** for delivering information services to subscriber televisions. Each subscriber television is associated with a home interface controller. The home interface controllers receive the television information signals and include a data transceiver for data communications. A subscriber selection device associated with a home interface controller permits subscriber interaction through the data transceiver with an assigned interactive controller from a plurality of interactive controllers. The assigned interactive controller is in communication with the information sources and in television communication with its assigned home interface controller. Selection of an information source may be made through channel selection of an apparent channel from any of a first group of apparent channels and a second group of apparent channels. Different

information services on different apparent channels from the first group of apparent channels are provided to a given home interface controller via the same television information signal as the subscriber changes channel selection from one of the apparent channels in the first group of apparent channels to another apparent channel in the first group of apparent channels. To receive apparent channels from the second group of apparent channels, a home interface controller simply selects the television information signal at its input corresponding to the selected channel.

L12 ANSWER 23 OF 38 USPATFULL

TI Subscriber directed simultaneous multiple signal presentation for interactive cable television system

PI US 6064377 20000516

AB An interactive television information system coupled to a cable television system having a headend for supplying information services and an information service distribution **network** for delivering information services to subscriber televisions. Each subscriber television is associated with a home interface controller. The home interface controllers receive the television information signals and include a data transceiver for data communications. A subscriber selection device associated with a home interface controller permits subscriber interaction through the data transceiver with an assigned interactive controller from a plurality of interactive controllers. The assigned interactive controller is in communication with the information sources and in television communication with its assigned home interface controller. Selection of an information source may be made through channel selection of an apparent channel from any of a first group of apparent channels and a second group of apparent channels. Different information services on different apparent channels from the first group of apparent channels are provided to a given home interface controller via the same television information signal as the subscriber changes channel selection from one of the apparent channels in the first group of apparent channels to another apparent channel in the first group of apparent channels. To receive apparent channels from the second group of apparent channels, a home interface controller simply selects the television information signal at its input corresponding to the selected channel.

L12 ANSWER 24 OF 38 USPATFULL

TI Cable television system with remote interactive processor

PI US 6034678 20000307

AB An interactive television information system coupled to a cable television system having a headend for supplying information services and an information service distribution **network** for delivering information services to subscriber televisions. Each subscriber television is associated with a home interface controller. The home interface controllers receive the television information signals and include a data transceiver for data communications. A subscriber selection device associated with a home interface controller permits subscriber interaction through the data transceiver with an assigned interactive controller from a plurality of interactive controllers. The assigned interactive controller is in communication with the information sources and in television communication with its assigned home interface controller. Selection of an information source may be made through channel selection of an apparent channel from any of a first group of apparent channels and a second group of apparent channels. Different information services on different apparent channels from the first group of apparent channels are provided to a given home interface controller via the same television information signal as the subscriber changes channel selection from one of the apparent channels in the first group of apparent channels to another apparent channel in the first group of apparent channels. To receive apparent channels from the second group of apparent channels, a home interface controller simply selects the



television information signal at its input corresponding to the selected channel.

L12 ANSWER 25 OF 38 USPATFULL

TI CATV communication system for changing first protocol syntax processor which processes data of first format to second protocol syntax processor processes data of second format

PI US 5892910 19990406

AB An adaptive protocol CATV communication system is embodied in a decentralized communication arrangement, wherein the communicating nodes are located at various points within the CATV system. Each communicating node has two protocol syntax processing components: 1) a protocol syntax processor (PSP) which is a downloadable software component that processes of incoming frames; and 2) an adaptive protocol processor which is a fixed software component that oversees the replacement of an old PSP with a new PSP. A master node initiates the migration from an old PSP to a new PSP by sending the new PSP image frames to a slave node. After the new PSP image is complete, the slave node enters a verification mode to test the new PSP. The master node sends special test frames to the slave node to verify the operability of the new PSP by using the old PSP. The results of the verification are conveyed back to the master node to take the appropriate actions. The CATV system remains fully operational for the duration of the PSP upgrade since the frequencies allocated for video programming differ from the frequencies allocated for data transmission.

L12 ANSWER 26 OF 38 USPATFULL

TI Apparatus and method for electronic mail virus detection and elimination

PI US 5889943 19990330

AB The detection and elimination of viruses on a computer **network** is disclosed. An apparatus for detecting and eliminating viruses which may be introduced by messages sent through a postal node of a **network** electronic mail system includes polling and retrieval modules in communication with the postal node to determine the presence of unscanned messages and to download data associated with them to a node for treatment by a virus analysis and treatment module. A method for detecting and eliminating viruses introduced by an electronic mail system includes polling the postal node for unscanned messages, downloading the messages into a memory of a node, and performing virus detection and analysis at the node.

L12 ANSWER 27 OF 38 USPATFULL

TI Wireless adapter architecture for mobile computing

PI US 5889816 19990330

AB A adapter for wireless networking provides for reconfigurable media access control and data packet formats. The flexible adapter comprises a modem interface for controlling an RF modem for transmitting data signals to and receiving data signals from another RF modem; a media access control circuit; and a computer system interface circuit. The computer system interface circuit provides an interface between a host computer system, the modem interface circuit and the media access control circuit.

L12 ANSWER 28 OF 38 USPATFULL

TI Protocol interface gateway and method of connecting an emulator to a **network**

PI US 5774695 19980630

AB A protocol interface gateway connects a telecommunication system emulator to a communications **network**. The gateway receives signals from the **network** and sends signals to the **network** that are formatted in a **network** protocol. The gateway converts signals received from the **network** into instructions in emulator code, and sends the instructions in emulator code to the emulator for processing. The emulator executes code in

blocks of application software utilized in a target telecommunications node. The gateway then receives the processed instructions in emulator code from the emulator, converts the processed instructions into signals formatted in the **network** protocol, and sends the signals to the communications **network**. The protocol interface gateway utilizes a UNIX socket that replaces Open Systems Interconnection (OSI) layers 1 and 2 of the **network** protocol to send and receive the signals from the **network**.

L12 ANSWER 29 OF 38 USPATFULL

TI Medium access control and air interface subsystem for an indoor wireless ATM **network**

PI US 5774461 19980630

AB A system for delivering packetized data in a **network** dynamically assigns a unique address to a mobile unit, allocates bandwidth within a wireless link by a token scheme and provides forward error correction for the packet. The system wirelessly transports the packets between a base station and an end point which is responsive to a link cell for linking the base station and the end point. The link cell contains a header and a body. The header in turn contains a forward error correction code, a radiopoint id and a token. The forward error correction code provides error detection and error correction that relies solely on a one-way communication of data bits from a sender to a receiver. The radiopoint id is a logical id assigned such that each radio-port in a vicinity has a unique id. The token enables the wireless transportation over a selected channel of the packets between the base station and the end point. The token is utilized to allocate the selected channel from a plurality of channels. A method is also described for delivering packetized data between an endpoint and a base station.

L12 ANSWER 30 OF 38 USPATFULL

TI System and method of testing open systems interconnection (OSI) layers in telecommunication networks

PI US 5732213 19980324

AB A development test system and method for testing Open Systems Interconnection (OSI) layers 3 through 7 of a communications protocol utilized between nodes in a telecommunications **network**. The system comprises a protocol simulator that simulates OSI layers 3 through 7 of the communications protocol, a local area **network** (LAN) connected to the protocol simulator with a first **Internet** socket interface which replaces OSI layers 1 and 2 of the simulated communications protocol, and a target telecommunication node connected to the LAN with a second **Internet** socket interface and performing operations with blocks of application software to validate the use of the communications protocol with the target telecommunication node. A protocol interface gateway (PIG-tool) is connected to the LAN with a third **Internet** socket interface, and serves as a gateway to a target telecommunication system emulator. The target telecommunication system emulator emulates a target telecommunication node and performs operations by executing the code of the application software utilized in the target telecommunication node. The operations validate the use of the communications protocol with the target telecommunication node software without having to utilize the target node hardware.

L12 ANSWER 31 OF 38 USPATFULL

TI Method for reducing unnecessary traffic over a computer **network**

PI US 5627829 19970506

AB Standard protocols, such as those commonly used on LAN networks, are used to connect nodes to an enterprise **network** via a wide area wireless **network**. Within the appropriate protocol stacks, the standard protocols are optimized by filtering some packets, eliminating and reducing the size of other fields and substituting still other

fields to reduce the size of the data packets. The optimized data packets can be transmitted over the wireless WAN increasing WAN efficiency. The optimization is accomplished by inserting an additional optimization layer into the protocol stack between the existing layers. The optimization layer accepts the normal protocol signals generated by the surrounding layers and generates outputs which mimic protocol layers which the surrounding layers expect. Consequently, the optimization layer operates transparently with respect to the existing protocol stack layers.

L12 ANSWER 32 OF 38 USPATFULL

TI Virus detection and removal apparatus for computer networks

PI US 5623600 19970422

AB A system for detecting and eliminating viruses on a computer **network** includes a File Transfer Protocol (FTP) proxy **server**, for controlling the transfer of files and a Simple Mail Transfer Protocol (SMTP) proxy **server** for controlling the transfer of mail messages through the system. The FTP proxy **server** and SMTP proxy **server** run concurrently with the normal operation of the system and operate in a manner such that viruses transmitted to or from the **network** in files and messages are detected before transfer into or from the system. The FTP proxy **server** and SMTP proxy **server** scan all incoming and outgoing files and messages, respectively before transfer for viruses and then transfer the files and messages, only if they do not contain any viruses. A method for processing a file before transmission into or from the **network** includes the steps of: receiving the data transfer command and file name; transferring the file to a system node; performing virus detection on the file; determining whether the file contains any viruses; transferring the file from the system to a recipient node if the file does not contain a virus; and deleting the file if the file contains a virus.

L12 ANSWER 33 OF 38 USPATFULL

TI System for distributing broadcast television services identically on a first bandwidth portion of a plurality of express trunks and interactive services over a second bandwidth portion of each express trunk on a subscriber demand basis

PI US 5557316 19960917

AB An interactive television information system having a node in television communication between a source of television information services and a plurality of home interface controllers. Each subscriber television is associated with a home interface controller. The home interface controllers receive the television information signals and include a data transceiver for data communications with the node. Express trunks deliver television information services to groups of subscribers. Each trunk includes a first bandwidth portion for carrying broadcast television signals in the same manner on each trunk. A second bandwidth portion carries television information services on a demand basis. The node responds to subscriber requests by selecting television information services for delivery over the second bandwidth portion of the express trunk coupled to the requesting home interface controller.

L12 ANSWER 34 OF 38 USPATFULL

TI Interactive and conventional television information system

PI US 5550578 19960827

AB An interactive television information system coupled to a cable television system having a headend for supplying information services and an information service distribution **network** for delivering information services to subscriber televisions. Each subscriber television is associated with a home interface controller. The home interface controllers receive the television information signals and include a data transceiver for data communications. A subscriber selection device associated with a home interface controller permits

subscriber interaction through the data transceiver with an assigned interactive controller from a plurality of interactive controllers. The assigned interactive controller is in communication with the information sources and in television communication with its assigned home interface controller. Selection of an information source may be made through channel selection of an apparent channel from any of a first group of apparent channels and a second group of apparent channels. Different information services on different apparent channels from the first group of apparent channels are provided to a given home interface controller via the same television information signal as the subscriber changes channel selection from one of the apparent channels in the first group of apparent channels to another apparent channel in the first group of apparent channels. To receive apparent channels from the second group of apparent channels, a home interface controller simply selects the television information signal at its input corresponding to the selected channel.

L12 ANSWER 35 OF 38 USPATFULL

TI Interactive home information system with signal assignment

PI US 5526034 19960611

AB An interactive home information system having a node in television communication and data communication with a group of home interface controllers. At each home interface controller, there is a signal input for receiving television signals from the node over a cable television distribution **network** and a data transceiver for conducting data communications with the node. The node determines whether a home interface controller is requesting interactive service. For each interface controller requesting interactive service, the node assigns a television information signal to the requesting home interface controller. Thus, signal assignment is accomplished on a demand basis for those interface controllers determined to be placed in an interactive mode. Signal assignment may involve selection of a given carrier frequency. Alternatively, signal assignment may involve selection of a time slice.

L12 ANSWER 36 OF 38 USPATFULL

TI Carousel display

PI US 5485197 19960116

AB An interactive home information system is described for providing interactive cable television services to a plurality of subscribers. The system includes a "node" which is in communication with the headend of the system and a group of subscriber home interface terminals. The node operates to selectively distribute information services obtained from the headend to ones of the terminals. The system includes circuitry for generating a display of a carousel on a subscriber's television. The displayed carousel includes a plurality of faces wherein an established one of the faces lists at least one available choice which can be selected by the subscriber via a displayed cursor. The system further includes circuitry for causing an apparent rotation of the displayed carousel in order to display additional choices on the established face.

L12 ANSWER 37 OF 38 USPATFULL

TI Method and apparatus for connecting a node to a wireless **network** using a standard protocol

PI US 5446736 19950829

AB Standard protocols, such as those commonly used on LAN networks, are used to connect nodes to an enterprise **network** via a wide area wireless **network**. Within the appropriate protocol stacks, the standard protocols are optimized by filtering some packets, eliminating and reducing the size of other fields and substituting still other fields to reduce the size of the data packets. The optimized data packets can be transmitted over the wireless WAN increasing WAN efficiency. The optimization is accomplished by inserting an additional optimization layer into the protocol stack between the existing layers.

The optimization layer accepts the normal protocol signals generated by the surrounding layers and generates outputs which mimic protocol layers which the surrounding layers expect. Consequently, the optimization layer operates transparently with respect to the existing protocol stack layers.

L12 ANSWER 38 OF 38 USPATEFULL

TI Scrambling method

PI US 5442700 19950815

AB A system for scrambling a television signal by designating a horizontal line number on a pseudorandom basis and then stripping the vertical and horizontal synch components from the signal at each location of a frame

L6 ANSWER 1 OF 4 USPATFULL

TI Method and apparatus for mobile wireless communication

PI US 2002073170 A1 20020613

AB An apparatus and method have a hub server for storing a relational database of information relating to trucking operations. The hub server is connected via a satellite link to an earth satellite which is connected through downlinks and uplinks to localize truck stop servers (TSS). The TSS in turn communicate via spread spectrum radio frequency signals with hand-held computers, such as personal digital assistants. The PDAs are used by truck drivers to send and receive e-mails and other information such as electronic freight bills, fuel information, route information and the like from the trucking company and to transmit information to the trucking company. In addition, a trucking company server may be accessed through the Internet by customer servers or third party servers to identify aspects of the trucking shipment.

L6 ANSWER 2 OF 4 USPATFULL

TI Intelligent network

PI US 6363411 B1 20020326

AB In a telecommunications switching network having a resource complex including network switches, an intelligent service platform for providing intelligent call processing and service execution for call events received at the switches and requiring call processing services. A centralized administration system is provided that comprises a system for storing one or more reusable business objects that each encapsulate a distinct call-processing function, and any associated data required by the business object; a system for distributing selected business objects and associated data to selected nodes in the switching network based on pre-determined node configuration criteria; and, a system for activating the business objects in preparation for real-time use. A computing platform is provided within each node for executing those business objects required to perform a service in accordance with an event received at the network switch. Also within a node is a storage and retrieval system for sorting and retrieving selected objects and any associated data distributed by the administration system, and making them locally available to the computing platform when required to perform a service. An underlying location-independent communication system is provided to coordinate interaction of one or more business objects to perform the service in response to needs of the received event.

L6 ANSWER 3 OF 4 USPATFULL

TI Telecommunications network with portability of mobile subscriber number

PI US 6064887 20000516

AB A telecommunications network (10) comprises a set of service provider/operator domains (20), including mobile telecommunications domains (20A-20C). A call-originating domain (20F) accesses a mobile subscriber number portability database (30F) to obtain the address of the gateway node (GMSC) of the telecommunications domain which currently serves a called mobile subscriber having a mobile station (70), and optionally the address of the home location register (HLR) of the called mobile subscriber. The address of the gateway node obtained from the database (and optionally the address of the home location register) are included along with the directory number (MSISDN) or IMSI of the called mobile subscriber in a routing message for completing the call. When changing service providers (e.g., changing to a new domain), the mobile subscriber number portability database is updated to reflect the change. Access of the database and usage of the address of the gateway node of the new domain in the routing message permit the mobile subscriber to retain the same MSISDN when changing service providers.

L6 ANSWER 4 OF 4 USPATFULL

TI Method and apparatus for establishing communication

PI US 6052372 20000418

AB Communications are established between a source user (305) and a destination user (307). Data is transmitted between these users in packets (204) having a destination address (205) and communication data (206). A destination name is identified in a first packet and this packet is transmitted to a service control platform (301) identifying, in its communication data, a destination name. A packet is then returned from the control platform (301) to the originating source (305) identifying a real contactable address for the identified destination (307). Subsequent packets of data are generated at the source (305) for transmission to the destination (307) wherein the transmitted packets have the actual destination address, as returned from the service platform, appended thereto.

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L8 ANSWER 1 OF 2 USPATFULL

TI Network-based mobile workgroup system

PI US 2002069278 A1 20020606

AB A network-based mobile workgroup system has considerably wider appeal and application than normal virtual private networks in that it provides seamless mobility across a number of access technologies at the same time as it offers a granular security separation down to workgroup level. The mobile workgroup system is an access management system for mobile users with VPN and firewall functionality inbuilt. The mobile user can access the mobile workgroup system over a set of access technologies and select server resources and correspondent nodes to access pending their workgroup membership approvals. All workgroup policy rules are defined in a mobile service manager and pushed down to one or more mobile service routers for policy enforcement. The mobile service router closest to the mobile client, and being part of the mobile virtual private network, performs regular authentication checks of the mobile client during service execution. At the same time it performs traffic filtering based on the mobile user's workgroup memberships. Together, these two components constitute an unprecedented security lock, effectively isolating a distributed workgroup into a mobile virtual private network.

L8 ANSWER 2 OF 2 USPATFULL

TI System and method for providing requested quality of service in a hybrid network

PI US 2002064149 A1 20020530

AB Telephone calls, data and other multimedia information is routed through a hybrid network which includes transfer of information across the internet. A media order entry captures complete user profile information for a user. This profile information is utilized by the system throughout the media experience for routing, billing, monitoring, reporting and other media control functions. Users can manage more aspects of a network than previously possible, and control network activities from a central site. The hybrid network also contains logic for responding to requests for quality of service and reserving the resources to provide the requested services.